Why'd I miss that bird?

by Jim Low Photography by Cliff White



Do you know how your shotgun performs with different loads?



A few years ago I tried a new load for my shotgun. The new load contained less shot and powder, so it kicked less. As a result, I shot better at targets flying back and forth across the skeet field.

But when I moved to the trap range, where targets whiz away from the shooter at what looks like warp speed, a strange trend emerged. I could break targets if I locked onto them quickly, but if I fired a moment later, many of the targets kept right on flying. I decided it was time to get some hard data on my new load's performance.

I made a quick trip to a furniture store and rescued a large cardboard box from the trash. Back at the range, I cut three pieces of cardboard three feet square and tacked them, plain sides out, to target frames. Then I fired one of my new loads at each sheet, one from 20 yards, another from 25 yards and the third from 30 yards.

The 20- and 25-yard targets looked good. Nowhere on these sheets was there a space the size of a clay target that didn't have at least one pellet hole.

The 30-yard target was another story. The pattern of pellet holes showed several patches where a clay target could have slipped through untouched.

Mystery solved. My new load, while a pleasure to shoot and perfectly adequate on the skeet range, wasn't going to work for trap. And it certainly wasn't going to be much good for dove hunting, where I often take shots at 30 or even 35 yards.

I was glad to have discovered the limitations of my new load before deciding I had lost my knack for wingshooting. More important, I had discovered the problem before going afield with the new shells to miss and cripple game.

While many hunters are familiar with the concept of shotgun patterning, surprisingly few actually do it. Their failure to determine exactly what their guns will and won't do with a particular load and choke at a given distance probably accounts for many of the rabbits, doves, ducks and turkeys that elude them each year.

Patterning a shotgun tells you three things that are critical to good shooting. First, you find out which load and choke combinations deliver the best killing patterns at different distances. Second, you learn the maximum distance that you can shoot at game and expect a quick, clean

kill. Third, patterning reveals whether you are really pointing your shotgun where you think you are.

This last fact may surprise you. Shotguns normally are used on moving targets, so you really can't aim them as you would a rifle. You develop instinctive skills that enable you to throw the pellets where you want them. Consequently, most gun makers don't invest much time aligning shotguns' front and rear beads precisely.

This lack of precision can be the difference between success and failure for turkey hunters, who do aim their scatterguns like rifles. And if the discrepancy between aiming point and point of impact is large enough, it can even cause problems for quail and rabbit hunters.

To pattern your shotgun, you need three or four targets for every combination of gun, shot shell and choke you want to test. They should be at least three feet square. Make a bold black dot in the middle of each target so you can aim right at the center.

Set your targets up at 10-yard intervals. You should shoot one target 10 yards nearer than the range at which you expect to shoot when hunting. Put the farthest target at the maximum distance you expect to shoot when hunting. When you set out each target, mark it with the distance, the type of shell being tested, the gun being used and-if the gun has an adjustable or interchangeable choke system-the choke.

After firing all the shells you want to test at each distance, lay the targets out and check the results. First look at how the shot patterns are centered on the closest targets. If most are left or right of center, you may have an explanation for why you miss so many passing shots. A gunsmith can take care of this problem.

You may also want to enlist a gunsmith's help if your gun shoots consistently high or low. But if you shoot well with the gun, you probably have taken the discrepancy into account in your instinctive shooting style. Correcting it might only force you to learn how to shoot all over again.

Next, lay out all the targets you shot with a particular load/gun/choke combination in order from closest to farthest. Check to see if the pattern of pellet holes on the nearest target is large enough that you could easily put a moving target within that area. If you did hit a rabbit or quail with that shot pattern, would you want to eat it?

Now look at the more distant targets, evaluating the effectiveness of the shot patterns. The pellet holes should be close enough together that the game could not avoid being hit by several pellets. This probably will be true of the midrange targets, but you may be surprised to find your pattern is too sparse at the maximum range where you thought you could kill game consistently.

Finally, look to see whether the shot is evenly distributed within the circle it covers. Uneven distribution creates holes in the pattern, which can lead to missed shots or crippled game.

Uneven patterns can result from damaged or defective shot shells, shoddy reloading or an overly restrictive choke.

Excessive choke is most likely to cause problems with steel shot larger than size BB. Being harder and springier than lead, steel pellets tend to fly apart after leaving the barrel if they are crowded together too tightly by the choke.

If your shotgun produces spotty patterns with every combination of choke and load, your problem could be an imperfection in the barrel. Take the gun and your patterning targets to a gunsmith and ask his advice.

Hunters who have patterned their guns are keenly aware of the need for a good shot pattern. They are likely to carry different choke tubes if their guns have interchangeable choke systems. As an alternative, they may carry two or three different shot-shell loads so they can adjust the amount of shot they throw at their targets for changing conditions.

Tailoring your choke or load to different conditions is fine, but it's no substitute for sportsmanship and judgement. You will always face shots you can't be sure will result in clean kills. Hunters who have patterned their shotgun know how far is too far, and in such situations an ethical hunter salutes the departing game with admiration for its wildness, rather than firing a careless volley.